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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,559	03/03/2004	Shoichiro Yasunami	Q80212	3278
23373	7590	04/24/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LE, HOA VAN	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Ch

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	10/791,559	YASUNAMI ET AL.	
	Examiner	Art Unit	
	Hoa V. Le	1752	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 13 April 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: \_\_\_\_\_.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
Please see the attachment.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

Hoa V. Le  
Primary Examiner  
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This is in response to Papers filed on 13 April 2006.

I. Applicant's arguments with respect the applied Uenishi et al (6,489,080) on the record filed 13 April 2006 have been fully considered but they are not persuasive.

Applicants urge that the applied Uenishi et al (6,489,080) is not related to “positive-working resist composition”. Please the title “POSITIVE RESIST COMPOSITION”. It would teach and suggest to one having ordinary skill in the art the use of a positive resist composition.

Applicants urge that PGA4(15, 21 and 31) is capable to generate a sulfonic acid only. In the absence of a test to prove it, PGA4(15, 21 and 31) is withdrawn from the rejection until someone later show or provide an evidence to the contrary. Then an allowed claim or a patent would have no value.

II. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipate by Uenishi et al (6,489,080).

Uenishi et al disclose and teach a positive resist composition comprising a resin being read on the resins of the A1 with resins c(25, 28, 29, 30, 31 and 32),

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resins of the A2 with resins c(4, 15, 22, 33, 34, 35, 36 and 37) on columns 37-44, up to 20 wt% of a compound of generating sulfonic acid up on irradiation with active rays or radiation (col.19, lines 7-12) represented by compounds I(1-14), II(1-5) and III(1-8) on columns 11-18, PAG(3-9, 14, 20, 21, 22, 23, 24, 25, 26 and 27), PGA(4-5, 6, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33 and 34), PGA(5-12) and PAG(6-1-15) on the bottom of columns 24-35, a nitrogen containing base on column 65, line 21 to column 66, line 37, fluorine/silicon surfactants on column 67, lines 26-35. One or more other types of photo-acid generators including carboxylic acid generator (compound PAG3-16) are taught and suggested to be used with the sulfonic acid generator in a ration of 100/0 of the other types of acid generator to sulfonic acid generator on column 18, line 58 to column 19, line 8.

Since Uenishi et al is reasonably disclosed and taught the claimed embodiment as broadly claimed, the above claims are found to be anticipated by Uenishi et al

III. Applicant's arguments with respect the applied Ishihara et al (2004/0033434) have been fully considered but they are not persuasive.

Applicants urge that the applied secondary references with respect to Ishihara et al (2004/0033434) do not disclose a polymer being read on the claims.

The record shows that the secondary reference with respect Ishihara et al (2004/0033434) is not relies up on for a teachings suggestions of a polymer a polymer since such claimed polymer is already disclosed, taught and suggested in the primary reference with respect Uenishi et al (6,489,080)

IV. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as

Being unpatentable over Uenishi et al (6,489,080) considered in view of Ishihara et al (2004/0033434).

Uenishi et al disclose and teach a positive resist composition comprising a resin being read on the resins of the A1 with resins c(25, 28, 29, 30, 31 and 32), resins of the A2 with resins c(4, 15, 22, 33, 34, 35, 36 and 37) on columns 37-44, up to 20 wt% of a compound of generating sulfonic acid up on irradiation with active rays or radiation (col.19, lines 7-12) represented by compounds I(1-14), II(1-5) and III(1-8) on columns 11-18, PAG(3-9, 14, 20, 21, 22, 23, 24, 25, 26 and 27), PGA(4-5, 6, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19, 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33 and 34), PGA(5-12) and PAG(6-1-15) on the bottom of columns 24-35, a nitrogen containing base on column 65, line 21 to column 66, line 37, fluorine/silicon surfactants on column 67, lines 26-35. One or more other types of photo-acid generators are taught and suggested to be used with the sulfonic acid

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generator in a ration of 100/0 of the other types of acid generator to sulfonic acid generator on column 18, line 58 to column 19, line 8.

Uenishi et al do not specify other carboxylic acid generations upon irradiation with active rays or radiation. Ishihara et al at paragraph 0054 is cited to show the known use of the claimed compound for providing a carboxylic acid generating compound in order to reduce a solubility of a resin in formulation a positive resist composition on paragraph 0075.

Since the above references are all related to positive resist compositions, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an additional compound capable of generating a carboxylic acid upon irradiation with active rays or radiation in Uenishi et al positive resist compositions for a reasonable expectation of further reducing a solubility of the resin when the positive resist composition is exposed to the irradiation as disclosed, taught, suggest and obtained in Ishihara et al.

V. Applicant's arguments with respect the comments to the showings under Rule 132 filed on 17 November 2005 has been fully considered but are not commensurate in scope with each of the parameters as broadly claimed in accordance MPEP 716.02 (d).

Applicants urge that the chemical ingredients and their amounts in the tests are close or closure than those applied in the applied prior art on the record. Any tested chemical ingredient (other than its adjacent homologue to be reasonable to one having ordinary skill in the art) and its amount (reasonably within + and – 3% to one having ordinary skill in the art) is not close to one having ordinary skill in the art until there is a convincing evidence being provided. Applicants have not and could not be able to show or provide it for the record. Therefore, the tests have little value because they are not tested to the closest applied chemical ingredients and their amounts from the applied prior art on the record. In addition, the claims have not been limited to the tested chemical ingredients and their amounts and their conditions. An allowed claim or patent would have no value if someone later show or provide and evidence that there is an altered property from the broadly claimed embodiments as compared to that in the tested result.

VI. Applicant's arguments with respect the applied Ishihara et al (2004/0033434). on the record filed 13 April 2006 have been fully considered but they are not persuasive.

Applicants urge that there is no example that use the claimed resin.

An alkyl having 1-10 carbons atom is encompassed and anticipated that of 1-5 atoms. Such teaching is not overly broad to one having ordinary skill in the art.

In the absence of convincing evidence to the contrary, the arguments to the functional embodiments in claims 1, 3, 6 and 7 have and given a little value in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429.

It is submitted that the rejections on the record are not based up on impermissible use of hindsight because they are not depended on any information that can be gleaned only from applicants specification in accordance with the authority stated in *In re McLaughlin*, 170 USPQ 209.

VII. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 102(a) (as recognized and corrected by applicants) (with (b) being a typographic error, withdrawn) as being anticipate by Ishihara et al (2004/0033434).

Ishihara et al disclose and teach a positive resist composition comprising a resin being read on the resins of the A1 with resins of the formula [11] with  $R^{(12,13)}$  and  $R^{(14)}$  being hydrogen...,  $R^{(16)}$  being hydrogen...,  $R^{(17)}$  being an alkyl,  $R^{(18)}$  being aralkyl...,  $R^{(19)}$  being a hydrogen...and with r, t and e being natural numbers, a resin being read on the resins of the A2 with resins of the formula [11] with  $R^{(11,12)}$  and  $R^{(14)}$  being hydrogen...,  $R^{(16)}$  being hydrogen...,  $R^{(17)}$  being an alkyl,  $R^{(18)}$  being an

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alkyl...,  $R^{(19)}$  being a hydrogen...and with r, t and e being natural numbers on paragraphs 0078 to 0082, 0085 and 0087-0088, formula [12] with  $R^{(12,13,14,16,17, 18 \text{ and } 19)}$  being the same as those in formula [11] and with r', t' and e' being natural numbers on paragraphs 0091-0093, 0.05 to 5 wt% of a compound of generating sulfonic acid up on irradiation with active rays or radiation on paragraphs 0065-0070 and 0072, 0087-0088, a nitrogen containing base on paragraph 0114, fluorine/silicon surfactants on paragraph 0117 and from 1-19 wt% of compound capable of generating a carboxylic acid upon irradiation with active rays or radiation on paragraphs 0054 and 0072.

Each and all functional embodiments in the claims, including those in claims 1, 3, 6 and 7 as specifically made the arguments by applicants have been reasonably considered inherent in the absence of a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429.

Since Ishihara et al disclose and teach the claimed embodiments, the above claims are found to be anticipated by Uenishi et al.

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VIII. Urano et al (5,976,759 and 6,656,660) and Sasaki et al (6,727,040) have about the same teachings as those applied above. The are cumulative but may be later applied when a claim is amended.

IX. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332. The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday though Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Hoa V. Le  
Primary Examiner  
Art Unit 1752

HVL  
19 April 2006.

HOA VAN LE  
PRIMARY EXAMINER  
